

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion is respectfully requested.

Claims 9-17 are pending in the application. Claims 9-10 are amended; and Claims 11-17 are added by the present amendment. Support for the new and amended claims can be found in the original specification, claims and drawings.¹ Thus, no new matter is presented.

In the outstanding Official Action, Claims 1 and 4-6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishiguro et al. (U.S. Patent No. 5,883,958, hereinafter “Ishiguro”) in view of Dolphin (U.S. Patent No. 5,457,746); and Claims 2, 3 and 7-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishiguro in view of Dolphin, and in further view of Yagawa et al. (U.S. Patent No. 6,751,598, hereinafter “Yagawa”).

Applicants respectfully submit that new and amended independent Claims 9, 10, 11, 14 and 15 state novel features clearly not taught or rendered obvious by the applied references.

New independent Claim 11, relates to an information processing method for preventing unauthorized operations from being performed on content data. The content data is stored in a first memory, and includes management information (e.g., content identifier, artist name, etc.) and calculation information (e.g., MAC value, encryption key, etc.). A sequential number related to the content data is stored and updated upon each operation (e.g., reproduce, copy, etc.) performed on the stored content. Calculation information is then calculated based on the management information and a latest stored sequential number. After receiving a request to perform an operation on the content data, the sequential number is incremented, and the management information is updated. Then, the calculation information included in the content, the management information included in the content, and the latest

¹ E.g., specification at Figs. 5-9.

sequential number from the second memory are read, and the calculation information included in the content read in the reading step is compared with calculation information calculated in the calculating step. An operation on the content is then controlled based on the result of the comparison between the two values (e.g., if the two values match, then the data has not been tampered with).

Such an operation prevents a user from modifying the management data (e.g., modifying the incremental value indicating a number of reproductions) to manipulate the data in an unauthorized manner.

Turning to the applied reference, Ishiguro describes a method and device for tamper resistant video data playback in which multiple sets of public keys, used to decrypt the video data, are retrieved from the DVD-ROM (2).² Each public key includes a corresponding “flag” indicating whether the key is valid. A controller (20) of the disc drive extracts the public key and associated flag relevant to the ID received from the controller (30).³ The controller (20) then verifies the validity of the flag of the public key.

Ishiguro, however, fails to teach or suggest an information processing apparatus for preventing unauthorized operations from being performed on content data, as recited in the pending claims. In particular, and as acknowledged in the outstanding Official Action,⁴ “Ishiguro does not disclose calculation means for performing a predetermined calculation on the basis of said . . . calculation information including updateable information which is updated upon execution of a predetermined operation performed on the content data.”

The Official Action rejected the features of the pending claims based on the proposition that Dolphin discloses the above feature⁵, and that it would have been obvious to modify Ishiguro by importing this feature from Dolphin to arrive at applications claimed

² Ishiguro at Abstract, and col. 3, lines 54-65..

³ Id. at col. 4, lines 6-15.

⁴ Official Action, p. 3, item 8.

⁵ Id., p. 3, items 9 and 10.

invention. Applicants respectfully submit, however, that Dolphin fails to teach or suggest features similar to those as noted above, and as recited in pending independent Claims 9, 10, 11, 14 and 15.

Specifically, new Claim 14 recites, *inter alia*, an information processing method comprising the steps of:

... storing content in a first memory, said content comprising management information and calculation information;
storing a sequential number incremented upon each operation on the content stored in a second memory, the sequential number associated with the content stored in the first memory;
calculating the calculation information based on the management information and a latest sequential number stored in the second memory...

Independent Claims 9, 10, 11, and 15 recite substantially similar features, therefore the arguments presented below also apply to these claims.

The outstanding Official Action cites Fig. 7; col. 7, lines 21-28; and col. 9, line 52-col. 10, line 8, of Dolphin. The cited portion of Dolphin describes using an encryption key that returns to zero after one or two reviews of content, or after a short duration, allowing a publisher to insure that out-of-date frequently updated records are not confused with current records. The cited portion of Dolphin also describes a process for organizing various data to be included on a CD-ROM, and that different data such as time duration, number of bytes accessed may be correlated to the data set by the publisher. Then, new keys are obtained from a database and the data is encrypted. This process may then be repeated when storing the data set to subsequent CD-ROMs.

Thus, Dolphin describes a process of assigning data to a CR-ROM, which may be accessed only for a period of time, by setting the key to zero upon expiration of the period of time. However, Dolphin fails to teach or suggest storing *a sequential number incremented upon each operation on the content stored in a second memory*, the sequential number

associated with the content stored in the first memory. Instead, Dolphin only describes that a number of bytes of access, or a time duration may be stored in association with the data (and a key set to zero after the expiration of the time period), neither of which correspond to *a sequential number incremented upon each operation on the content stored in a second memory*, as recited in the pending independent claims. Further, Dolphin fails to teach or suggest that any value stored in association with the content, whatsoever, is altered based on an operation performed on the content data.

Further, as Dolphin fails to teach or suggest a *sequential number incremented upon each operation on the content stored in a second memory*, the reference also fails to teach or suggest *calculating the calculation information* (stored on the content memory) *based on the management information and a latest sequential number stored in the second memory*. As noted above, Dolphin describes that management data corresponding to a time duration or number of bytes may be stored in the data set, but fails to teach or suggest that any of this information is calculated, much less calculated with *a latest sequential number stored in the second memory*, as recited in the pending independent claims.

Further, new Claim 14 recites, *inter alia*, an information processing method comprising the steps of:

...reading the calculation information included in the content from the first memory, the management information included in the content, and the latest sequential number from the second memory;

comparing calculation information included in the content read in the reading step with calculation information calculated in the calculating step upon receiving a request to perform an operation on the content; and

controlling an operation on the content based on a result of the comparing step.

Applicants respectfully submit that neither Ishiguro nor Dolphin, neither alone, nor in combination, teach or suggest the reading, comparing, and controlling steps as recited in new independent Claim 14.

Accordingly, Applicant respectfully submits that new independent Claims 11, 14 and 15 (and the claims that depend therefrom) patentably define over the applied references.

Claims 9 and 10 were rejected under as being unpatentable over Ishiguro in view of Dolphin, and in further view of Yagawa.

However, as discussed above, neither Ishiguro nor Dolphin, neither alone nor in combination, teach or suggest storing *a sequential number incremented upon each operation on the content stored in a second memory*, as differentiated above. Likewise, Yagawa fails to remedy this deficiency, and therefore none of the cited references, alone or in combination, teach or suggest Applicants' Claims 9 and 10 which include the above-noted feature by virtue of dependency. Therefore, the applied references fail to provide a *prima facie* case of obviousness with regard to any of these claims.

Accordingly, Applicants respectfully requests the rejection of Claims 9 and 10 under 35 U.S.C. § 103 be withdrawn.

Consequently, in view of the present Amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 9-17 is patentably distinguishing over the applied references. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

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